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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,277	12/15/2004	Michel Petit	PF020069	6692
24498	7590	02/02/2006	EXAMINER	
THOMSON LICENSING INC. PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			LE, TUNG X	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/518,277	PETIT ET AL.	
	Examiner	Art Unit	
	Tung X. Le	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/15/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/15/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the applicant's filing on December 15, 2004. In virtue of this filing, claims 1-5 are currently presented in the instant application.

Drawings

The drawings are objected to because FIG. 1 is not labeled correctly.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections / Minor Informalities

Claims 1-5 are objected to because of the following informalities:

Claim 1, in line 1, "the" between "correcting and "image" should be deleted.

Claim 1, in line 1, "the" between "on" and "screen" should be changed to "a".

Claim 1, in line 3, "the" between "form," and "values" should be deleted.

Claim 1, in line 3, "the" between "of" and "line" should be changed to "a".

Claim 1, in line 4, "the" before "frame" should be changed to "a".

Claim 1, in line 4, "asynchoronously" should be corrected to "asynchronously".

Claim 1, in line 4, --;-- should be inserted after "asynchronously".

Claim 1, in line 5, --;-- should be inserted after "memory".

Claim 1, in line 7, --;-- should be inserted after "value".

Claim 1, in line 8, --;-- should be inserted after "converter".

Claim 1, in line 9, --; and-- should be inserted after "filter".

Claim 2, in line 1, "the" between "correcting" and "line" should be changed to "a".

Claim 2, in line 3, "the" between "evaluating" and "value" should be change to "a".

Claim 2, in line 3, "I" should be changed to "(I);".

Claim 2, in line 4, "intended" should be changed to "configured".

Claim 2, in line 5, "I" should be changed to "(I)".

Claim 2, in line 5, --;-- should be inserted after "values".

Claim 2, in line 6, "It" should be changed to "(It);".

Claim 2, in line 8, --;-- should be inserted after "current".

Claim 2, in line 12, --;-- should be inserted after "signals".

Claim 2, in line 13, --at least one-- should be inserted between "the" and "digital/analogue".

Claim 2, in line 14, --; and-- should be inserted after "converter".

Claim 3, in line 2, "the" between "wherein" and "sampling" should be changed to "a".

Claim 3, in line 3, "the" between "to" and "line" should be changed to "a".

Claim 4, in line 2, "the" before "cut-off" should be changed to "a".

Claim 5, in line 2, --at least one-- should be inserted between "the" and "digital".

Claim 5, in line 2, "converters operate" should be changed to "converter operates".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) Fig. 1 in view of Masumoto et al. (U.S. Patent No. 5,734,233).

With respect to claim 1, AAPA Fig. 1 shows a device for correcting a image distortions created on a screen of a cathode ray tube and a corresponding method comprising the following steps: determining in digital form [3,4], values of a line scan current [Il] synchronously and of a frame scan current [It] asynchronously; using these values to address the inputs of a correction memory [5]; programming the correction memory so that for each address at input there corresponds at output at least one correction value; converting the correction value with the aid of a digital/analogue converter [10]; and applying an electrical quantity dependent on the correction value to at least one magnetic coil [30] of the deflection system disposed on the cathode ray tube. However, AAPA Fig. 1 does not disclose a step of filtering the correction values with the aid of a low-pass filter between the converting step and the applying step.

Masumoto discloses in figure 1 a method of correcting image distortions created on a screen of a cathode ray tube comprising a step of filtering the correction values with the aid of a low-pass filter [9] between the converting step (via D/A converter [5]) and the applying step(via analog multiplier [11]) in order for adjusting the convergence precisely for a wide range of synchronizing signal frequencies (see column 11, lines 45-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device or the corresponding method of AAPA Fig. 1 by arranging a low pass filter between the digital analog converters and amplifiers or performing such a corresponding step to adjust the convergence for a wide range of synchronizing signal frequencies since such a use of low-pass filter step for the stated purpose has been well known in the art as evidenced by the teaching of Masumoto (see column 11, lines 45-54).

Allowable Subject Matter

Claims 2-5 would be allowed if corrected to overcome the objections set forth above.

The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to disclose or fairly suggest a device for correcting a line and/or frame fields of a deflector for cathode ray tube comprising a current sensor for evaluating a value of the line current; and a series of comparators configured to compare the value of the line current with reference values, in combination with the

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remaining claimed limitations as claimed in claim 2 (claims 3-5 would be allowed since they are dependent on claim 2).

Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

George (U.S. Publication No. 2004/0125243 A1) – convergence optimization in a projection display;

Ogino (U.S. Patent No. 5,663,615) – reciprocal deflection type CRT displaying apparatus;

Muraguchi et al. (U.S. Patent No. 6,545,435 B2) – cathode ray tube and signal detecting method in cathode ray tube;

Ogino et al. (U.S. Patent No. 5,712,532) – scalable CRT display device and phase synchronous circuit for use in display device;

Tripod (U.S. Patent No. 5,652,482) – bidirectional deflection and display systems;

Matsumi et al. (U.S. Patent No. 5,059,872) – digital convergence correction device;

Yamada et al. (U.S. Patent No. 4,980,614) – convergence correction circuit; and

Kraus et al. (U.S. Patent No. 4,672,449) – line deflection circuit for picture pick-up or display devices.


Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Le whose telephone number is 571-272-6010. The examiner can normally be reached on 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Tung Le
AU 2821



THUY V. TRAN
PRIMARY EXAMINER